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chain nodes :
 2 3 4 5 6 8 9 11
 chain bonds :
 2-3 2-4 2-5 2-6 4-9 5-11 6-8
 exact/norm bonds :
 2-3 2-4 2-5 2-6 4-9 5-11 6-8

G1:B,Al,As,Ga,In,Sb

G2:Cb,Cy,Hy,Ak

Match level :
2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 8:CLASS 9:CLASS 11:CLASS

L1 STRUCTURE uploaded

=> d his

(FILE 'HOME' ENTERED AT 19:17:29 ON 10 DEC 2009)

FILE 'REGISTRY' ENTERED AT 19:17:46 ON 10 DEC 2009
L1 STRUCTURE uploaded

=> d 11

L1 HAS NO ANSWERS

L1 STR



G1 B,Al,As,Ga,In,Sb

G2 Cb,Cy,Hy,Ak

Structure attributes must be viewed using STN Express query preparation.

=> s 11

SAMPLE SEARCH INITIATED 19:18:09 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 500 TO ITERATE

100.0% PROCESSED 500 ITERATIONS 5 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS: 8659 TO 11341

PROJECTED ANSWERS: 5 TO 234

L2 5 SEA SSS SAM L1

=> s 11 full
FULL SEARCH INITIATED 19:18:17 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 10229 TO ITERATE

100.0% PROCESSED 10229 ITERATIONS 70 ANSWERS
SEARCH TIME: 00.00.01

L3 70 SEA SSS FUL L1

=> fil caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	185.88	186.10

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FILE COVERS 1907 - 10 Dec 2009 VOL 151 ISS 24
FILE LAST UPDATED: 9 Dec 2009 (20091209/ED)
REVISED CLASS FIELDS ('NCL') LAST RELOADED: Oct 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Aug 2009

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=> s 13
L4          43 L3

=> s 14 and py<=2004
      25161915 PY<=2004
L5          29 L4 AND PY<=2004

=> s 15 and perfluorinated
      6862 PERFLUORINATED
L6          0 L5 AND PERFLUORINATED

=> s 15 and partially fluorinated
      369899 PARTIALLY
      43174 FLUORINATED
      1316 PARTIALLY FLUORINATED
      (PARTIALLY(W)FLUORINATED)
L7          0 L5 AND PARTIALLY FLUORINATED

=> d 1-29 bib abs
L7 HAS NO ANSWERS
'BIB ABS ' IS NOT A VALID STRUCTURE FORMAT KEYWORD
Structure Formats
SIA ----- Structure Image, Attributes, and map table if it contains
          data. (Default)
SIM ----- Structure IMage.
SAT ----- Structure ATtributes and map table if it contains data.
SCT ----- Structure Connection Table and map table if it contains
```

data.
SDA ----- All Structure DAta (image, attributes, connection table and
map table if it contains data).
NOS ----- NO Structure data.
ENTER STRUCTURE FORMAT (SIA), SCT, SDA, SIM, SAT, NOS:end

=> d 15 1-29 bib abs

L5 ANSWER 1 OF 29 CAPLUS COPYRIGHT 2009 ACS on STN
AN 2004:900028 CAPLUS
DN 142:68010
TI From weakly coordinating to non-coordinating anions? A simple preparation
of the silver salt of the least coordinating anion and its application to
determine the ground state structure of the Ag(η 2-P4)2+ cation
AU Bihlmeier, Angela; Gonsior, Marcin; Raabe, Ines; Trapp, Nils; Krossing,
Ingo
CS Institut fuer Anorganische Chemie, Universitaet Karlsruhe, Karlsruhe,
76128, Germany
SO Chemistry--A European Journal (2004), 10(20), 5041-5051
CODEN: CEIJED; ISSN: 0947-6539
PB Wiley-VCH Verlag GmbH & Co. KGaA
DT Journal
LA English
OS CASREACT 142:68010
AB The unexpected but facile preparation of the Ag salt of the least coordinating
[(RO)3Al-F-Al(OR)3]- anion (R = C(CF3)3) by reaction of Ag[Al(OR)4] with
one equivalent of PCl3 is described. The mechanism of the formation of
Ag[(RO)3Al-F-Al(OR)3] is explained based on the available exptl. data as
well as on quantum chemical calcns. with the inclusion of entropy and COSMO
solvation enthalpies. The crystal structures of (RO)3Al(OC4H8),
Cs[(RO)2(Me)AlFA1(Me)(OR)2], Ag(CH2Cl2)3[(RO)3AlFA1(OR)3] and
Ag(η 2-P4)2[(RO)3AlFA1(OR)3]- are described. From the collected data
the [(RO)3AlFA1(OR)3]- anion is the least coordinating anion currently
known. With respect to the F- ion affinity of two parent Lewis acids
Al(OR)3 of 685 kJ mol-1, the ligand affinity (441 kJ mol-1), the proton
and Cu decomposition reactions (-983 and -297 kJ mol-1) as well as HOMO level
and HOMO-LUMO gap and in comparison with [Sb4F21]-, [Sb(OTeF5)6]-,
[Al(OR)4]- as well as [B(RF)4]- (RF = CF3 or C6F5) the
[(RO)3Al-F-Al(OR)3]- anion is among the best weakly coordinating anions
(WCAs) according to each value. In contrast to most of the other cited
anions, the [(RO)3AlFA1(OR)3] anion is available by a simple preparation in
conventional inorg. labs. The least coordinating character of this anion
was employed to clarify the question of the ground state geometry of the
Ag(η 2-P4)2+ cation (D2h, D2 or D2d). In agreement with computational
data and NMR spectra it could be shown that the rotation along the
Ag-(P-P-centroid) vector has no barrier and that the structure adopted in
the solid state depends on packing effects which lead to an almost D2h
sym. Ag(η 2-P4)2+ cation (0 to 10.6° torsion) for the more sym.
[Al(OR)4]- anion, but to a D2 sym. Ag(η 2-P4)2+ cation with a
44° twist angle of the two AgP2 planes for the less sym.
[(RO)3AlFA1(OR)3]- anion. This implies that Ag back bonding, suggested by
quantum chemical population analyses to be of importance, is only weak.
OSC.G 24 THERE ARE 24 CAPLUS RECORDS THAT CITE THIS RECORD (24 CITINGS)
RE.CNT 90 THERE ARE 90 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 2 OF 29 CAPLUS COPYRIGHT 2009 ACS on STN
AN 2004:900026 CAPLUS
DN 142:63045

TI Relative stabilities of weakly coordinating anions: A computational study
AU Krossing, Ingo; Raabe, Ines
CS Institut fuer Anorganische Chemie, Universitaet Karlsruhe, Karlsruhe,

76128, Germany
SO Chemistry--A European Journal (2004), 10(20), 5017-5030
CODEN: CEUJED; ISSN: 0947-6539
PB Wiley-VCH Verlag GmbH & Co. KGaA
DT Journal
LA English
AB This article describes BP86/SV(P) (DFT) calcns. on a representative set of weakly coordinating anions (WCAs) of type $[M(L)n]^-$, their parent neutral Lewis acids $M(L)n-1$ and their ate complexes with fluoride, i.e., $[M(L)n-1]^-$ ($M = B$, $L = F$, $OTeF_5$, C_6H_5 , C_6F_5 , $C_6H_3(CF_3)_2$, CF_3 ; $M = P$, As , Sb , $L = F$, $OTeF_5$; $M = Al$, $L = OC(CF_3)_3$). Compds. with fluoride bridges, i.e., $SbnF_5n$ and $[SbnF_5n-1]^-$ ($n = 2, 3, 4$), $Al_2(L)5F$ and $[(L)3Al-F-Al(L)3]^-$ ($L = OC(CF_3)_3$), $(F4C_6\{1,2-B(L)2\}2)_n$, $[F4C_6\{1,2-B(L)2\}2F]^-$, $[F4C_6\{1,2-B(L)2\}2OMe]^-$ ($L = C_6F_5$) were also calculated. Based on these BP86/SV(P) and auxiliary MP2/TZVPP, G2, and CBS-Q calcns. the relative stabilities and coordinating abilities of these WCAs were established with regard to the fluoride ion affinities (FIA) of the parent Lewis acids, the ligand affinity (LA) of the WCAs, the decomposition of a given WCA in the presence of a hard (H^+ , proton decomposition PD) and a soft electrophile (Cu^+ , copper decomposition CuD), the position of the HOMO, the HOMO-LUMO gap, and population analyses of the anions providing partial charges for all atoms. To obtain data that is more reliable, the assessed quantities were calculated through isodesmic reactions. If parts of the calcns. could not be done isodesmically, higher levels such as MP2/TZVPP, G2, and CBS-Q were used to obtain reliable values for these reactions. Although the obtained results can not be taken as absolute, the relative ordering of the stabilities of all WCAs will undoubtedly be correct, since a single methodol. was chosen for the investigation. To include media effects the decomposition reactions of a subset of 14 WCAs with the $SiMe_3^+$ and $[Cp_2ZrMe]^+$ ions were also calculated in $PhCl$ and $1,2-F_2C_6H_4$ (COSMO solvation model). We found that in most cases gas-phase calcns. and solution calcns. give comparable results for the stability of the anion. Applications of the LA and FIA that allow one to decide, on thermodyn. grounds, which WCA or Lewis acid is the most suitable for a given problem are sketched.
OSC.G 25 THERE ARE 25 CAPLUS RECORDS THAT CITE THIS RECORD (25 CITINGS)
RE.CNT 142 THERE ARE 142 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 3 OF 29 CAPLUS COPYRIGHT 2009 ACS on STN
AN 2004:728365 CAPLUS
DN 141:382056
TI Conductivities and electrochemical stabilities of lithium salts of polyfluoroalkoxyaluminate superweak anions
AU Tsujioka, Shoichi; Nolan, Benjamin G.; Takase, Hironari; Fauber, Benjamin P.; Strauss, Steven H.
CS Department of Chemistry, Colorado State University, Fort Collins, CO, 80523 USA, USA
SO Journal of the Electrochemical Society (2004), 151(9), A1418-A1423
CODEN: JESOAN; ISSN: 0013-4651
PB Electrochemical Society
DT Journal
LA English
AB Six lithium salts of tris- and tetrakis(polyfluoroalkoxy)aluminate superweak anions were studied for their potential use as battery electrolytes. Four of the six are based on the formula $LiAl(OCR(CF_3)_2)_4$ ($R = H$, Me , CF_3 , Ph); the other two are $LiAl(OCH_2CF_3)_4$ and $LiAl(OCPh(CF_3)_2)_3$. The thermally stable electrolytes $LiAl(OCH(CF_3)_2)_4$ and $LiAl(OCPh(CF_3)_2)_4$ were not oxidized at potentials less than or equal to 5.0 V vs. $Li^+/0$ in dimethoxyethane (DME) or in 50:50% ethylene carbonate:dimethylcarbonate (EC:DMC). The $LiAl(OCH(CF_3)_2)_4$ electrolyte was not reduced at 0 V vs. $Li^+/0$ in DME. Neither $LiAl(OCH(CF_3)_2)_4$ nor

LiAl(OCPh(CF3)2)4 promoted the corrosion of aluminum at 5.0 V vs. Li+/0. The electrolyte LiAl(OC(CF3)2)4 underwent efficient, reversible reductive intercalation of Li+ with MCMB carbon or LiCoO2 electrodes over the potential ranges 0-2 and 2.4-4.8 V, resp., vs. Li+/0, but did not react in any other way with these electrode materials. The conductivities of some of the LiAl(OR)4 electrolytes in DME or in EC:DMC were high enough for them to be considered as potential replacements for LiPF6 in primary and secondary lithium batteries.

OSC.G 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)
RE.CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 4 OF 29 CAPLUS COPYRIGHT 2009 ACS on STN
AN 2004:638855 CAPLUS
DN 141:324605
TI The reaction of Li[Al(OR)4] R = OC(CF3)2Ph, OC(CF3)3 with NO/NO2 giving NO[Al(OR)4], Li[NO3] and N2O. The synthesis of NO[Al(OR)4] from Li[Al(OR)4] and NO[SbF6] in sulfur dioxide solution
AU Decker, Andreas; Jenkins, H. Donald Brooke; Nikiforov, Grigori B.; Passmore, Jack
CS Chemistry Department, University of New Brunswick, Fredericton, NB, E3B 6E2, Can.
SO Dalton Transactions (2004), (16), 2496-2504
CODEN: DTARAF; ISSN: 1477-9226
PB Royal Society of Chemistry
DT Journal
LA English
OS CASREACT 141:324605
AB NO[Al(OC(CF3)2Ph)4] 1 and NO[Al(OC(CF3)3)4] 2 were obtained by the metathesis reaction of NO[SbF6] and the corresponding Li[Al(OR)4] salts in liquid SO2 solution in .apprx.40% (1) and 85% (2) isolated yield. 1 And 2, as well as Li[NO3] and N2O, were also obtained by the reaction of an excess of mixture of (90 mol% NO, (10 mol% NO2 with Li[Al(OR)4] followed by extraction with SO2. The unfavorable disproportionation reaction of 2NO2(g) to [NO]+(g) and [NO3]-(g) [ΔH° = +616.2 kJ mol-1] is more than compensated by the disproportionation energy of 3NO(g) to N2O(g) and NO2(g) [ΔH° = -155.4 kJ mol-1] and the lattice energy of Li[NO3] (s) [UPOT = 862 kJ mol-1]. Evidence is presented that the reaction proceeds via a complex of [Li]+ with NO, NO2 (or their dimers) and N2O. NO2 and Li[Al(OC(CF3)3)4] gave [NO3(No3)][Al(OC(CF3)3)4]2, NO[Al(OC(CF3)3)4] and (NO2)[Al(OC(CF3)3)4] products. The Al complex {Li[AlF(OC(CF3)2Ph)3]}2 3 was prepared by the thermal decomposition of Li[Al(OC(CF3)2Ph)4]. Compds. 1 and 3 were characterized by single crystal x-ray structural analyses, 1-3 by elemental analyses, NMR, IR, Raman and mass spectra. Solid 1 contains [Al(OC(CF3)2Ph)4]- and [NO]+ weakly linked via donor acceptor interactions, while in the SO2 solution there is an equilibrium between the associated [NO]+[Al(OC(CF3)2Ph)4]- and separated solvated ions. Solid 2 contains essentially ionic [NO]+ and [Al(OC(CF3)3)4]-. Complex 3 consists of two {Li[AlF(OC(CF3)2Ph)3]} units linked via F Li contacts. Compound 1 is unstable in the SO2 solution and decomp. to yield [AlF(OC(CF3)2Ph)3]-, [(PhOC(CF3)2O)3Al(μ-F)Al(OC(CF3)2Ph)3]- anions as well as (NO)C6H4C(CF3)2OH, while compound 2 is stable in liquid SO2. The v(NO+) in 1 and [NO]+(toluene)[SbCl6] are similar, implying similar basicities of [Al(OC(CF3)2Ph)4]- and toluene.
OSC.G 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS RECORD (11 CITINGS)
RE.CNT 92 THERE ARE 92 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 5 OF 29 CAPLUS COPYRIGHT 2009 ACS on STN
AN 2002:806300 CAPLUS

DN 138:116824
 TI PX4+, P2X5+, and P5X2+ (X = Br, I) salts of the superweak Al(OR)4- anion
 [R = C(CF3)3]
 AU Gonsior, Marcin; Krossing, Ingo; Muller, Lutz; Raabe, Ines; Jansen, Martin; Van Wullen, Leo
 CS University of Karlsruhe, Karlsruhe, 76128, Germany
 SO Chemistry--A European Journal (2002), 8(19), 4475-4492
 CODEN: CEUJED; ISSN: 0947-6539
 PB Wiley-VCH Verlag GmbH & Co. KGaA
 DT Journal
 LA English
 OS CASREACT 138:116824
 AB PX4+[Al(OR)4]- (X = I: 1a, X = Br: 1b) was prepared from X2, PX3, and Ag[Al(OR)4] [R = C(CF3)3] in CH2Cl2 at -30° in 69-86% yield. P2X5+ salts were prepared from 2PX3 and Ag[Al(OR)4] in CH2Cl2 at -30° yielding almost quant. P2X5+[Al(OR)4]- (X = I: 3a, X = Br: 3b). The P-rich P5X2+ salts arose from the reaction of cold (-78°) mixts. of PX3, P4, and Ag[Al(OR)4] giving P5X2+[Al(OR)4]- (X = I: 4a, X = Br: 4b) with a C2v-sym. P5 cage. Silver salt metathesis presumably generated unstable PX2+ cations from PX3 and Ag[Al(OR)4] (X = Br, I) that acted as electrophilic carbene analogs and inserted into the X-X (P-X/P-P) bond of X2(PX3/P4) leading to the highly electrophilic and CH2Cl2-soluble PX4+ (P2X5+|P5X2+) salts. Reactions that aimed to synthesize P2I3+ from P2I4 and Ag[Al(OR)4] instead led to anion decomposition and the formation of P2I5(CS2)-1(RO)3Al-F-Al(OR)3]- (5). All salts were characterized by variable-temperature solution NMR studies (3b also by 31P MAS NMR), Raman and/or IR spectroscopy as well as x-ray crystallog. (with the exception of 4a). The thermochem. vols. of the P-X cations are 121 (PBr4+), 161 (PI4+), 194 (P2Br5+), 271 (P2I5+), and 180 Å (P5Br2+). The observed reactions were fully accounted for by thermochem. calcns. based on (RI-)MP2/TZVPP ab initio results and COSMO solvation enthalpy calcns. (CH2Cl2 solution). The enthalpies of formation of the gaseous P-X cations were derived as +764 (PI4+), +617 (PBr4+), +749 (P2I5+), +579 (P2Br5+), +762 (P5I2+), and +705 kJ mol-1 (P5Br2+). The insertion of the intermediately prepared carbene analog PX2+ cations into the resp. bonds were calculated, at the (RI-)MP2/TZVPP level, to be exergonic at 298 K in CH2Cl2 by ΔG(CH2Cl2) = -133.5 (PI4+), -183.9 (PBr4+), -106.5 (P2I5+), -81.5 (P2Br5+), -113.2 (P5I2+), and -114.5 kJ mol-1 (P5Br2+).
 OSC.G 38 THERE ARE 38 CAPLUS RECORDS THAT CITE THIS RECORD (38 CITINGS)
 RE.CNT 60 THERE ARE 60 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 6 OF 29 CAPLUS COPYRIGHT 2009 ACS on STN
 AN 2002:608776 CAPLUS
 DN 137:345155
 TI A thallium coated dianion: trigonal bipyramidal [Tl2Al(OR)3]2- coordinated to three Tl+ cations in the ion pair [Tl3F2Al(OR)3]+[Al(OR)4]- [R = CH(CF3)2]
 AU Gonsior, Marcin; Krossing, Ingo; Mitzel, Norbert
 CS Institut fuer Anorganische Chemie, Universitaet Karlsruhe, Karlsruhe, D-76128, Germany
 SO Zeitschrift fuer Anorganische und Allgemeine Chemie (2002), 628(8), 1821-1830
 CODEN: ZAACAB; ISSN: 0044-2313
 PB Wiley-VCH Verlag GmbH
 DT Journal
 LA English
 OS CASREACT 137:345155
 AB The reproducible synthesis of the unusual ionic aluminum compound [Tl3F2Al(OR)3]+[Al(OR)4]- (1) is reported. In the reaction of Li[Al(OR)4] [R = C(H)(CF3)2] with TlF the initially desired Tl[Al(OR)4] only formed

with an exact 1:1 stoichiometry, while an excess of TlF led to $[Tl_3F_2Al(OR)_3]+[Al(OR)_4]-$ (1). Addnl. the x-ray single crystal structure of the byproduct $[(ROH)TlAl(OR)_3(\mu-F)]_2$ (2) was determined. Compds. 1 and 2 were characterized by x-ray single crystal structure detns. and 1 also by NMR spectroscopy and an elemental anal. In 1 the $[Tl_3F_2Al(OR)_3]+$ cation forms a trigonal bipyramidal with a pentacoordinate aluminum atom. Three Tl^+ cations cover the $[F_2Al(OR)_3]^{2-}$ dianion core and the charge of the resulting $[Tl_3F_2Al(OR)_3]+$ cation is compensated by a weakly coordinating $[Al(OR)_4]-$ anion. Compound 2 contains a centrosym. $[Al(OR)_3(\mu-F)]^{2-}$ dianion core with pentacoordinate aluminum atoms building a distorted edge sharing double trigonal bipyramidal. The $[Al(OR)_3(\mu-F)]^{2-}$ dianion coordinates two $[Tl(ROH)]^+$ cations giving the non charged mol. $[(R-OH)TlAl(OR)_3(\mu-F)]_2$ (2). Based on BP86/SVP (DFT) and lattice enthalpy calcns. a pathway of the reaction is proposed to rationalize the formation of the $[M_3F_2Al(OR)_3]+$ cation upon reaction of $Li[Al(OR)_4]$ with MF for $M = Tl$ but not for $M = Cs$ (cf Cs^+ and Tl^+ have very similar ionic radii). Using a suitable Born-Haber cycle and in agreement with the experiment, the enthalpies of the reaction of two $M[Al(OR)_4]$ with two MF giving $[M_3F_2Al(OR)_3]+[Al(OR)_4]-$ and MOR are favorable for $M = Tl$ by 127 kJ/mol but endothermic for the formation of the hypothetical $[Cs_3F_2Al(OR)_3]+[Al(OR)_4]-$ by 95 kJ/mol. It is suggested that in the reaction leading to 1 initially $Tl[Al(OR)_4]$ is formed, followed by an abstraction of $TlOR$ and $Al(OR)_3$. The latter very strong Lewis acid reacts subsequently with an excess of TlF yielding 1.

OSC.G 21 THERE ARE 21 CAPLUS RECORDS THAT CITE THIS RECORD (22 CITINGS)
 RE.CNT 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

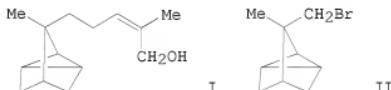
L5 ANSWER 7 OF 29 CAPLUS COPYRIGHT 2009 ACS on STN
 AN 2002:125461 CAPLUS
 DN 136:394846
 TI Reactions of P4 and I2 with Ag[Al(OC(CF3)3)4]: from elusive polyphosphorus cations to subvalent P3I6+ and phosphorus rich P5I2+
 AU Krossing, Ingo
 CS University of Karlsruhe, Karlsruhe, 76128, Germany
 SO Journal of the Chemical Society, Dalton Transactions (2002),
 (4), 500-512
 CODEN: JCSDAA; ISSN: 1472-7773
 PB Royal Society of Chemistry
 DT Journal
 LA English
 OS CASREACT 136:394846
 AB Reactions of X2 (X = Br, I), P4 and Ag(CH2Cl2)[Al(OR)4] [R = C(CF3)3] in suitable ratios to prepare naked polyphosphorus cations were carried out and led to products which suggested these elusive cations as intermediates. At temps. $>30^\circ$ to rt the initially formed cations decomposed the $Al(OR)_4^-$ anion giving, in two cases, the more stable fluoride bridged $(RO)_3Al-F-Al(OR)_3^-$ anion. When Br2 was used as the oxidizing agent the proposed intermediate P cation (P5+) reacted with the solvent $CDCl_3$ by double insertion of a P+ unit into the C-Cl bond giving $C_12P(CDCl_3)_2[(RO)_3Al-F-Al(OR)_3]$ (1). When I2 was used as the oxidizer the reaction led to the marginally stable $P3I6[(RO)_3Al-F-Al(OR)_3]$ (2, x-ray characterization). By using very mild conditions throughout (-80°) the primary product of the reaction of $Ag(P4)_2[Al(OR)_4]$ and I2 was isolated: $P5I2[Al(OR)_4]$ (3) containing the $P5I2^+$ cation with a hitherto unknown C2v-sym. P5 cage as structural building block. $P3I6[Al(OR)_4]$ (4) was directly synthesized in quant. yield starting from P2I4, PI3 and $Ag(CH_2Cl_2)[Al(OR)_4]$ in CH_2Cl_2 solution. $P3I6^+$ is formed through the P2I5+ stage (31P-NMR). $P3I6^+$ (average: P2.33) is the first subvalent P-X cation (X = H, F, Cl, Br, I). $P5I2^+$ (average: P0.6) is the first P-rich binary P-X cation. They are the third and fourth example of a binary P-X cation after the known PX_4^+ and $P2X_5^+$ cations. The observed reactions were fully

accounted for by thermochem. Born-Haber cycles based on (RI-)MP2/TZVPP ab initio, COSMO solvation and lattice enthalpy calcns. (all phases). The gaseous enthalpies of formation of several species are (in kJ mol⁻¹): P5+ (913), P3I6+ (694), P5I2+ (792), P2I5+ (733), Ag(P4)2+ (784).

OSC.G 37 THERE ARE 37 CAPLUS RECORDS THAT CITE THIS RECORD (38 CITINGS)
RE.CNT 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 8 OF 29 CAPLUS COPYRIGHT 2009 ACS on STN
AN 1998:321390 CAPLUS
DN 129:41181
OREF 129:8663a,8666a
TI The regioselectivity of 1,3-disubstituted allylmetal species towards electrophiles. 1-(Trimethylsilyl)alk-2-enylpotassium compounds
AU Schlosser, Manfred; Franzini, Livia
CS Institut Chimie Organique, Universite Lausanne, Lausanne, CH-1015, Switz.
SO Synthesis (1998), (5), 707-709
CODEN: SYNTBF; ISSN: 0039-7881
PB Georg Thieme Verlag
DT Journal
LA English
OS CASREACT 129:41181
AB 1-(Trimethylsilyl)alk-2-enylpotassium species are readily generated by deprotonation of (alk-2-enyl)trimethylsilanes with the superbasic mixture of Buli and KOCMe₃. Like the parent compound, [1-(trimethylsilyl)allyl]potassium, they react with a variety of electrophiles preferentially, if not exclusively, at the silyl-distant terminus of the allyl moiety, thus producing branched ene silanes. The opposite regioselectivity previously observed with MeI hence appears to be an exception.
OSC.G 23 THERE ARE 23 CAPLUS RECORDS THAT CITE THIS RECORD (23 CITINGS)

L5 ANSWER 9 OF 29 CAPLUS COPYRIGHT 2009 ACS on STN
AN 1994:107378 CAPLUS
DN 120:107378
OREF 120:18973a,18976a
TI A shortcut to α -santalol
AU Schlosser, Manfred; Zhong, Guo Fu
CS Inst. Chim. Org., Univ. Lausanne, Lausanne, CH-1005, Switz.
SO Tetrahedron Letters (1993), 34(34), 5441-4
CODEN: TELEAY; ISSN: 0040-4039
DT Journal
LA English
OS CASREACT 120:107378
GI



AB α -Santalol (Z-I) can be prepared from the readily available 8-bromotricyclycene (II) in a one-flask procedure under perfect regio- and stereocontrol.

OSC.G 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)

L5 ANSWER 10 OF 29 CAPLUS COPYRIGHT 2009 ACS on STN
AN 1989:224392 CAPLUS

DN 110:224392
OREF 110:37047a,37050a
TI Formation of peroxy complexes containing boron and carbon from boron-11, carbon-13 and fluorine-19 NMR data
AU Brovkin, O. V.; Chernyshov, B. N.
CS Inst. Khim., USSR
SO Zhurnal Neorganicheskoi Khimii (1989), 34(2), 299-303
CODEN: ZNOKAQ; ISSN: 0044-457X
DT Journal
LA Russian
AB The reactions of Na or K hydroxycarbonates in aqueous H₂O₂ solns. or MHCO₃ (M = Na,K) with M₂B3O₇4OH, M₃B3O₇F₆ or MBF₃O₄H in aqueous H₂O₂ solns. were studied by ¹³C, ¹¹B and ¹⁹F NMR spectroscopy. In saturated aqueous H₂O₂, the hydroxycarbonates form HCO₂(O₂)⁻. The addition of the fluoroborates to these solns. yielded peroxy complexes with monodentate peroxide. The formation of BF₄-n(HCO₄)_n⁻, B₂F₂(O₂)₂(HCO₄)₂₂₋ and B₂F₄-n(O₂)₂(HCO₃)_{n2-} was observed

L5 ANSWER 11 OF 29 CAPLUS COPYRIGHT 2009 ACS on STN
AN 1988:562336 CAPLUS
DN 109:162336
OREF 109:26765a,26768a
TI Redistribution of alkali methoxyfluoroborates in anhydrous methanol
AU Plakhotnik, V. N.; Parkhomenko, N. G.; Kharchenko, L. V.; Sokolov, V. V.; Kopanov, V. D.
CS USSR
SO Voprosy Khimii i Khimicheskoi Tekhnologii (1987), 84, 34-8
CODEN: VKKCAJ; ISSN: 0321-4095
DT Journal
LA Russian
AB The redistribution reactions of M[BF₃(OMe)] (M = Li, Na, K) were studied in MeOH by ¹⁹F NMR. The redistribution of BF₃(OMe)⁻ led to BF₄⁻ and hydrolysis gave BF₃(OH)⁻. The initial rate of the processes increased with a decrease of the cation size because of its polarizing effect on the inner coordination sphere. The redistribution of K[BF(OMe)₃] is faster than that of K[BF₃(OMe)]. K[BF(OMe)₃] is converted to K[BF₃(OMe)], K[B(OMe)₄] and [B₂F(OMe)₆]⁻.

L5 ANSWER 12 OF 29 CAPLUS COPYRIGHT 2009 ACS on STN
AN 1987:77709 CAPLUS
DN 106:77709
OREF 106:12617a,12620a
TI Composition and structure of aluminum fluoro complexes in aqueous alcoholic solutions
AU Kon'shin, V. V.; Chernyshov, B. N.; Ippolitov, E. G.
CS Inst. Khim., Vladivostok, USSR
SO Koordinatsionnaya Khimiya (1986), 12(10), 1345-50
CODEN: KOKHDC; ISSN: 0132-344X
DT Journal
LA Russian
AB Competitive solvation of fluoroaluminum complexes was studied in aqueous MeOH and aqueous EtOH solns. by ¹⁹F NMR spectra. In these solns. the fluoroaluminum complexes exist only as a monofluoro complex. With an increase of alc. concentration in the solns. successive substitution of H₂O by the alc. occurred. in the solvation shell of monofluoroaluminum. Twelve ¹⁹F NMR signals are observed for all the theor. possible [AlF(H₂O)_n(ROH)_{5-m}]²⁺ (n = 1-5).

L5 ANSWER 13 OF 29 CAPLUS COPYRIGHT 2009 ACS on STN
AN 1985:588477 CAPLUS
DN 103:188477
OREF 103:30187a,30190a
TI Boron-11, fluorine-19 NMR of solutions of hydroxofluoroborates in acetic

and peracetic acids

AU Shchetinina, G. P.; Brovkina, O. V.; Chernyshov, B. N.

CS USSR

SO Zhurnal Neorganicheskoi Khimii (1985), 30(8), 2161-3

CODEN: ZNOKAQ; ISSN: 0044-457X

DT Journal

LA Russian

AB According to ^{11}B and ^{19}F NMR spectra of $\text{MBF}_3(\text{OH})$ ($\text{M} = \text{NH}_4, \text{K}, \text{Na}$), $(\text{NH}_4)_2\text{B}_3\text{O}_3\text{F}_4(\text{OH})$, and $\text{Na}_3\text{B}_3\text{O}_3\text{F}_6$ in HOAc and HOAc indicated nucleophilic substitution of OH^- groups by OAc^- and OOAc^- groups occurred.

L5 ANSWER 14 OF 29 CAPLUS COPYRIGHT 2009 ACS on STN

AN 1985:85235 CAPLUS

DN 102:85235

OREF 102:13301a,13304a

TI Fluoride and chloride affinities of main group oxides, fluorides, oxofluorides, and alkyls. Quantitative scales of Lewis acidities from ion cyclotron resonance halide-exchange equilibria

AU Larson, J. W.; McMahon, T. B.

CS Dep. Chem., Univ. New Brunswick, Fredericton, NB, E3B 6E2, Can.

SO Journal of the American Chemical Society (1985), 107(4), 766-73

CODEN: JACSAT; ISSN: 0002-7863

DT Journal

LA English

AB Accurate binding energies of F^- and Cl^- ions to a wide variety of Lewis acids including oxides, fluorides, oxofluorides, and alkyl derivs. of B, C, Si, P, As, and S were determined with ion cyclotron resonances halide-exchange equilibrium techniques. Magnitudes of Cl^- and F^- binding energies are discussed in terms of periodic trends, substituent effects, scales of Lewis acid hardness and softness, and empirical correlations. The limited data reveal not strong motivation for definitions of a hard-soft character of Lewis acids and bases in the gas phase. Useful new thermochem. data are derived for complex anions which are used to estimate crystal lattice energies for salts of complex Cl^- and F^- anions. Implications for new synthetic targets and potential catalytic agents are discussed.

OSC.G 72 THERE ARE 72 CAPLUS RECORDS THAT CITE THIS RECORD (72 CITINGS)

L5 ANSWER 15 OF 29 CAPLUS COPYRIGHT 2009 ACS on STN

AN 1982:412651 CAPLUS

DN 97:12651

OREF 97:2181a,2184a

TI Complexing of fluoride ion with boromethyl ether in methanol

AU Plakhotnik, V. N.; Parkhomenko, N. G.; Gulivets, I. L.

CS Dnepropetrol. Inst. Inzh. Zhelezodorozh. Transp., Dnepropetrovsk, USSR

SO Koordinatsionnaya Khimiya (1982), 8(5), 631-5

CODEN: KOKHDC; ISSN: 0132-344X

DT Journal

LA Russian

AB The equilibrium $\text{F}^- + \text{B}(\text{OMe})_3 \rightleftharpoons \text{FB}(\text{OMe})_3$ was studied potentiometrically by using an F^- -selective electrode in the $\text{KF-B}(\text{OMe})_3\text{-MeOH}$ system at 25 and 9° . The stability constant of $\text{FB}(\text{OMe})_3^-$ at 25° is $(0.7-1.7) \times 10^2$ and at 9° , 8×10^2 . The heat of reaction is -18 kcal/mol . A calorimetric study gave $-20 \pm 2 \text{ kcal/mol}$ and $\Delta S = -57 \text{ entropy units}$.

L5 ANSWER 16 OF 29 CAPLUS COPYRIGHT 2009 ACS on STN

AN 1981:113683 CAPLUS

DN 94:113683

OREF 94:18423a,18426a

TI Study of methoxyfluoroborates in water-methanol solutions by a fluorine-19 NMR method

AU Vasilyuk, N. S.; Chernyshov, B. N.
CS Inst. Khim., Sverdlovsk, USSR
SO Koordinatsionnaya Khimiya (1981), 7(1), 78-81
CODEN: KOKHDC; ISSN: 0132-344X
DT Journal
LA Russian
AB According to ^{19}F NMR spectra, H_3BO_3 reacts with NH_4HF_2 in aqueous MeOH to give $[\text{BF}_4^-\text{n}(\text{OMe})_n]^-$ ($n = 1-3$). The appearance of $[\text{BF}_2(\text{OMe})_2]^-$ in aqueous MeOH solns. of $\text{NH}_4[\text{BF}_3(\text{OH})]$ is the result of the stepwise dissociation of $[\text{BF}_3(\text{OMe})]^-$ with the formation of $[\text{BF}(\text{OMe})_3]^-$ and $[\text{BF}_2(\text{OMe})_2]^-$.
L5 ANSWER 17 OF 29 CAPLUS COPYRIGHT 2009 ACS on STN
AN 1979:65891 CAPLUS
DN 90:65891
OREF 90:10331a,10334a
TI Complex fluoroanions in solution. IX. Boron trifluoride-anion complexes and their disproportionation
AU Brownstein, S.; Latremouille, G.
CS Div. Chem., Natl. Res. Counc. Canada, Ottawa, ON, Can.
SO Canadian Journal of Chemistry (1978), 56(21), 2764-7
CODEN: CJCHAG; ISSN: 0008-4042
DT Journal
LA English
AB Complex fluoroanions were prepared from BF_3 and perchlorate, nitrate, nitrite, acetate, formate, azide, cyanate, thiocyanate, and thiophenolate ions. The complexes formed from the anions (X^-) of the strong acids, except the hydrogen halides, do not disproportionate to $\text{BF}_2(X^-)_2^-$. Complexes of anions of weaker acids may disproportionate and/or complex a 2nd mol. of BF_3 . Regularities in F-B coupling consts. are tabulated.
OSC.G 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)
L5 ANSWER 18 OF 29 CAPLUS COPYRIGHT 2009 ACS on STN
AN 1978:431595 CAPLUS
DN 89:31595
OREF 89:4801a,4804a
TI Formic acid-aluminum trifluoride-water and formic acid-gallium trifluoride-water systems
AU Opalovskii, A. A.; Gudimovich, T. F.; Kutovaya, L. M.; Popov, V. P.
CS Odess. Gos. Univ., Odessa, USSR
SO Zhurnal Neorganicheskoi Khimii (1978), 23(5), 1361-6
CODEN: ZNOKAQ; ISSN: 0044-457X
DT Journal
LA Russian
AB The 15° solubility isotherms were determined and solid phase compns. were established by the Schreinemacher's method. Crystallization branches include $\text{AlF}_3\cdot 3\text{H}_2\text{O}$, $\text{AlF}_3\cdot \text{HCOOH}\cdot 3\text{H}_2\text{O}$, $\text{AlF}_3\cdot 3\text{HCOOH}\cdot 3\text{H}_2\text{O}$, $\text{GaF}_3\cdot 3\text{H}_2\text{O}$, $\text{GaF}_3\cdot \text{HCOOH}\cdot 3\text{H}_2\text{O}$, and $\text{GaF}_3\cdot 3\text{HCOOH}\cdot 3\text{H}_2\text{O}$.
L5 ANSWER 19 OF 29 CAPLUS COPYRIGHT 2009 ACS on STN
AN 1976:144050 CAPLUS
DN 84:144050
OREF 84:23343a,23346a
TI Synthesis and some properties of rubidium trimethoxyfluoroborate
AU Plakhotnik, V. N.; Parkhomenko, N. G.
CS Dnepropetr. Inst. Inzh. Zhelezodorozhn. Transp., Dnepropetrovsk, USSR
SO Izvestiya Vysshikh Uchebnykh Zavedenii, Khimiya i Khimicheskaya Tekhnologiya (1976), 19(1), 156-7
CODEN: IVUKAR; ISSN: 0579-2991
DT Journal
LA Russian
AB $\text{Rb}[\text{BF}(\text{OMe})_3]$ (I) was prepared by the reaction of RbF and $\text{B}(\text{OMe})_3$ (2-fold excess) in MeOH. I is readily soluble in MeOH and dioxane, slightly soluble in

EtOH and DMF, and insol. in C6H6, CC14, Et2O, and petroleum ether. I is easily hydrolyzed and begins to melt at 230-40°. I decomp. to B(OMe)3 and RbF.

L5 ANSWER 20 OF 29 CAPLUS COPYRIGHT 2009 ACS on STN
AN 1974:420331 CAPLUS
DN 81:20331
OREF 81:3229a,3232a
TI Synthesis and properties of cesium trimethoxyfluoroborate
AU Plakhonik, V. N.; Parkhomenko, N. G.; Esvikov, V. V.
CS Dnepropetr. Inst. Inzh. Zheleznodorozhn. Transp., Dnepropetrovsk, USSR
SO Zhurnal Neorganicheskoi Khimii (1974), 19(5), 1260-3
CODEN: ZNOKAQ; ISSN: 0044-457X
DT Journal
LA Russian
AB CsF reacted with B(OMe)3 in anhydrous MeOH to give Cs[BF(OMe)3] which was characterized by NMR and ir spectra. Cs[BF(OMe)3] decomp. thermally to CsF and B(OMe)3 at 240-320°. The ir spectrum indicates the presence of a B-F bond.

L5 ANSWER 21 OF 29 CAPLUS COPYRIGHT 2009 ACS on STN
AN 1971:60398 CAPLUS
DN 74:60398
OREF 74:9713a,9716a
TI Reaction of trimethyl borate with sodium fluoride
AU Ryss, I. G.; Parkhomenko, N. G.
CS Dnepropetr. Inst. Inzh. Zheleznodorozhn. Transp., Dnepropetrovsk, USSR
SO Zhurnal Neorganicheskoi Khimii (1970), 15(12), 3370-1
CODEN: ZNOKAQ; ISSN: 0044-457X
DT Journal
LA Russian
AB At 24°, the reaction of NaF with B(OMe)3 in MeOH solution gave a small yield of a solid, which contained mainly NaF and a very small concentration of optically anisotropic crystals. These crystals are probably Na[BF(OMe)3]. Chemical anal. revealed that the solid product contained a Na/F/B/OMe ratio of 1:1.01:0.155:0.63.

L5 ANSWER 22 OF 29 CAPLUS COPYRIGHT 2009 ACS on STN
AN 1970:106640 CAPLUS
DN 72:106640
OREF 72:19285a,19288a
TI Preparation of stable antimony(V)-nitrogen compounds
AU Hass, Dieter; Cech, Dieter
CS Sekt. Chem., Humboldt Univ. Berlin, Berlin, Fed. Rep. Ger.
SO Zeitschrift fuer Chemie (1970), 10(2), 75-6
CODEN: ZECEAL; ISSN: 0044-2402
DT Journal
LA German
AB SbBr2(OEt)3 reacts with NH2Pr in Et2O to give Sb(NHPr)2(OEt)3 (I) which splits off PrNH2 in vacuum to give Sb(NHPr)2(OEt)3. Sb(NHCH2Ph)(OEt)3 was similarly prepared which splits off EtOH in vacuum to give Sb(NHCH2Ph)(OEt)2. I was also obtained from Sb(OEt)5 and excess amine. I was treated with HCl to give SbCl2(OEt)3 and PrNH2.HCl. Fluorination of I with AsF3 gave SbF2(OEt)3 and AsF(NPr). Sb(OEt)5 and HF gave SbF2(OEt)3. SbF2(OEt)3 was treated with PrNH2 to give SbF2(OEt)2NHPr which splits off EtOH in vacuum to give a cyclic compound [SbF2(OEt)NPr]n. SbF2(OEt)3 reacted with PhNH2 to give SbF2(OEt)2NHPh.

L5 ANSWER 23 OF 29 CAPLUS COPYRIGHT 2009 ACS on STN
AN 1970:42640 CAPLUS
DN 72:42640
OREF 72:7799a,7802a

TI Aminolysis of fluoroarsenic(V) alcoholates
AU Hass, Dieter; Cech, Ingrid
CS Sek. Chem., Humboldt-Univ. Berlin, Berlin, Fed. Rep. Ger.
SO Zeitschrift fuer Chemie (1969), 9(11), 432
CODEN: ZECEAL; ISSN: 0044-2402
DT Journal
LA German
GI For diagram(s), see printed CA Issue.
AB As(OMe)4F and PrNH2 was refluxed to give As(OMe)3(NHPr)F which split off MeOH in vacuum to give As(OMe)2(NPr)F (I). The mol. weight determination indicated I
to be dimeric with 2 bridging NPr groups. I was also formed by the reaction of As(OMe)3F2 and excess PrNH2. As(OMe)4F and RNH2, such as PhCH2NH2, was refluxed to give dimeric II.

L5 ANSWER 24 OF 29 CAPLUS COPYRIGHT 2009 ACS on STN
AN 1970:18060 CAPLUS
DN 72:18060
OREF 72:3287a,3290a
TI Acidolysis of orthoarsenic acid esters
AU Hass, Dieter; Cech, Ingrid
CS Humboldt-Univ., Berlin, Fed. Rep. Ger.
SO Zeitschrift fuer Chemie (1969), 9(10), 384-5
CODEN: ZECEAL; ISSN: 0044-2402
DT Journal
LA German
AB As(OMe)5 reacted with equimolar amts. of HF to give FAs(OMe)4, which was stable in vacuo <30°. ClAs(OMe)4, prepared similarly, was very unstable and decomposed to OAs (OMe)3 and MeCl. As(OMe)5 reacted with 2 moles HF to give unstable FeAs(OMe)3. The reaction of As(OMe)5 with >1 mole HCl led to the reduction of As(V) to As(III).

L5 ANSWER 25 OF 29 CAPLUS COPYRIGHT 2009 ACS on STN
AN 1968:464182 CAPLUS
DN 69:64182
OREF 69:11987a,11990a
TI Fluoromethoxyborates
AU Kolditz, Lothar; Lung, Cheng-Shou
CS Humboldt-Univ., Berlin, Fed. Rep. Ger.
SO Zeitschrift fuer Anorganische und Allgemeine Chemie (1968), 360(1-2), 25-30
CODEN: ZAACAB; ISSN: 0044-2313
DT Journal
LA German
AB M[BFn(OMe)4-n] (I), M = Na or K, n = 2 or 3, were prepared (80-95% yield) in Et2O at -40°; I (n = 1) was prepared at 54°. I (n = 1) were least thermally stable and produced the fluoride and boric acid ester on decomposition; I, n > 1, produced fluoride, tetrafluoroborate, and boric acid ester on decomposition X-ray diffraction line diagrams of the I compds. are shown.

L5 ANSWER 26 OF 29 CAPLUS COPYRIGHT 2009 ACS on STN
AN 1968:118887 CAPLUS
DN 68:118887
OREF 68:22923a
TI Synthesis and properties of potassium trimethoxyfluoroborate K[BF(OCH3)3]
AU Ryss, I. G.; Plakhotnik, V. N.
CS Dnepropetrovsk. Inst. Inzh. Zheleznodorozh. Transp., Dnepropetrovsk, USSR
SO Doklady Akademii Nauk SSSR (1968), 178(5), 1102-5
CODEN: DANKAS; ISSN: 0002-3264
DT Journal
LA Russian

AB B(OMe)3 (0.0854 mole) was added to a mixture of 0.084 mole KF with 20 ml. MeOH, cooled to 0°. The resulting viscous solution was filtered and the filtrate treated with 80 ml. anhydrous Et2O to yield 8.75 g. (67%) K[BF(OMe)3] (I). In aqueous solns. I is hydrolyzed to H3BO3, F-, and MeOH. At >154°, I decompose forming KF and B(OMe)3.

OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L5 ANSWER 27 OF 29 CAPLUS COPYRIGHT 2009 ACS on STN

AN 1968:86792 CAPLUS

DN 68:86792

OREF 68:16699a,16702a

TI Fluorine-containing compounds of Group V elements. XXI. Composition of fluoroarsenic acid esters and preparation of fluoroalkoxo-, hexaalkoxo-, and dialkoxoarsenates

AU Kolditz, Lothar; Riesel, Gisela

CS Humboldt-Univ., Berlin, Fed. Rep. Ger.

SO Zeitschrift fuer Anorganische und Allgemeine Chemie (1967), 355(3-4), 170-5

CODEN: ZAACAB; ISSN: 0044-2313

DT Journal

LA German

AB Under strong stirring and at 0°, AsF3 was added dropwise to O:As(OEt)3 in a mole ratio of 2:1 to give an oligomer of fluoroarsenic acid Et ester (I). The oligomer of fluoroarsenic acid Me ester (II) was similarly prepared. Treatment of As(OMe)5 with CsF in a mole ratio of 1:1 in MeOH at 0° gave Cs[AsF(OMe)5]. The reaction of O:As(OMe)3 with CsF in a mole ratio of 1:3 in MeOH gave Cs[AsF3(OMe)3]. Similarly prepared was Cs[AsF3(OEt)3]. The reaction of I in EtOH with MF (M = K, Cs) gave M[AsF5OEt]. Similarly prepared were K[AsF4(OMe)2] and Cs[AsF5OMe]. Treatment of O:As(OMe)3 in MeOH with Li in MeOH at room temperature in a mole ratio of 1:1 gave Li[As(OMe)6] and LiAsO2(OMe)2. The thermal decomposition of Li[As(OMe)6] at 180° gave As(OMe)5.

L5 ANSWER 28 OF 29 CAPLUS COPYRIGHT 2009 ACS on STN

AN 1963:447906 CAPLUS

DN 59:47906

OREF 59:8598c-d

TI Halogen derivatives of salts of organic acids

IN Marks, Burton S.; Schoepfle, Blaine O.

PA Hooker Chemical Corp.

SO 3 pp.; Continuation-in-part of U.S. 2,996,528 (CA 56, 4623d)

DT Patent

LA Unavailable

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 3080406		19630305	US 1960-75927	19601215 <--
PRAI	US		19601215		

AB Compsd. of the general formula (RCO2)3SbX2 are prepared by adding the stoichiometric amount of F, Cl, or Br to (RCO2)3Sb; R is an alkyl radical of 3 to 12 carbon atoms, an aryl radical, or an aralkyl radical. Thus, 0.02 mole of Br was added to 0.02 mole of Sb caprylate in CC14. The Br color was dissipated rapidly on addition of 80%, slowly on standing on addition of the

last 20%. The solvent was removed to give an orange oil, which could not be purified further. The salts are used as fire-retarding additives in polyesters.

OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L5 ANSWER 29 OF 29 CAPLUS COPYRIGHT 2009 ACS on STN

AN 1961:129718 CAPLUS

DN 55:129718

OREF 55:24363C-g
 TI Fluorine-containing compounds of Group V elements. XIII. Monomeric
 fluoarsenic acid esters
 AU Kolditz, Lothar; Hass, Dieter
 CS Friedrich Schiller Univ., Jena, Germany
 SO Zeitschrift fuer Anorganische und Allgemeine Chemie (1961), 307,
 290-303
 CODEN: ZAACAB; ISSN: 0044-2313
 DT Journal
 LA Unavailable
 AB cf. CA 54, 8396g. Esters of mono- and difluoarsenic acids were prepared
 from esters of arsenic acid and HF or AsF₃ by one or more of the following
 syntheses: 2HF + OAs(OR)₃ → F2AsO(OR) + 2ROH; HF + OAs(OR)₃
 → FAsO(OR)₂ + ROH; OAs(OR)₃ + F2AsO(OR) → ROH 2FAsO(OR)₂;
 OAs(OR)₃ + AsF₃ → ROH F2AsOR + FAsO(OR)₂; OAs(OR)₃ + 2AsF₃
 → ROH 2F2AsOR + F2AsO(OR). Mixed esters were prepared by starting
 with mixed esters of arsenic acid or, in syntheses requiring ROH, a
 different alc. from that involved in the arsenic acid ester. The 1 mol.
 ROH always associated with 1 mol. of ester could not be removed without
 decomposing the ester. The probable structures, FAs(OH)(OEt)₃ and
 F2As(OH)(OEt)₂, were supported by infrared spectroscopy. The following
 were isolated: FAs(OH)(OMe)₃, b3-5 40-3°; FAs(OH)(OMe)₂(OEt), b3-5
 47-9°; FAs(OH)(OMe)(OEt)₂, b3-5 54-6°; FAs(OH)(OEt)₃, b3-5
 55-8°; FAs(OH)(OEt)₃, b3-5 78-81°; F2As(OH)(OMe)(OEt), m.
 66-8°; F2As(OH)(OEt)₂, m. 40-2°; F2AsOMe, b. 65°;
 F2AsOEt, b. 75°; F2AsOPr, b. 95°; F2AsOBu, b. 107°.
 Even at relatively low concns. in nonpolar solvents the fluoesters
 condense, probably by H bonding between OH groups and F atoms. Conductivity
 data
 for FAs(OH)(OMe)₃, FAs(OH)(OMe)₂(OEt), FAs(OH)(OEt)₃, FAs(OH)(OPr)₃,
 F2As(OH)(OMe)(OEt), and F2As(OH)(OEt)₂ show that these esters are dissociated
 in MeCN at 20°; the order of conductivity is Me > Et > Pr. Values for the
 mixed esters fall between those for the Me and Et compds. Mol.-weight detns.
 in MeCN show that the dissociation is 2FAs(OH)(OR)₃ → As(OH)(OR)₃⁺ +
 As(OH)(OR)₃F2⁻. Transport expts. for FAs(OH)(OEt)₃ and F2As(OH)(OEt)₂ in
 MeCN confirm the F- transfer.

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2 3 4 5 7 8 10
chain bonds :
2-5 2-3 2-4 3-8 4-10 5-7
exact/norm bonds :
2-5 2-3 2-4 3-8 4-10 5-7

G1:B,Al,Ga,In,P

G2:Cb,Cy,Hy,Ak

Match level :
2:CLASS 3:CLASS 4:CLASS 5:CLASS 7:CLASS 8:CLASS 10:CLASS

L1 STRUCTURE uploaded

=> d his

(FILE 'HOME' ENTERED AT 12:33:15 ON 11 DEC 2009)

FILE 'REGISTRY' ENTERED AT 12:33:48 ON 11 DEC 2009
L1 STRUCTURE uploaded

=> d 11

L1 HAS NO ANSWERS
L1 STR

G2—O—G1—O—G2
|
O
|
G2

G1 B,Al,Ga,In,P

G2 Cb,Cy,Hy,Ak

Structure attributes must be viewed using STN Express query preparation.

=> s 11

SAMPLE SEARCH INITIATED 12:34:17 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 43381 TO ITERATE

4.6% PROCESSED 2000 ITERATIONS 50 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 855171 TO 880069
PROJECTED ANSWERS: 87476 TO 95590

L2 50 SEA SSS SAM L1

=> s 11 full

FULL SEARCH INITIATED 12:34:28 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 866908 TO ITERATE

100.0% PROCESSED 866908 ITERATIONS (2 INCOMPLETE) 97771 ANSWERS
SEARCH TIME: 00.00.11

L3 97771 SEA SSS FUL L1

=> fil caplus
COST IN U.S. DOLLARS

SINCE FILE TOTAL
ENTRY SESSION

FULL ESTIMATED COST

187.32

187.54

FILE 'CPLUS' ENTERED AT 12:36:04 ON 11 DEC 2009
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FILE COVERS 1907 - 11 Dec 2009 VOL 151 ISS 25
FILE LAST UPDATED: 10 Dec 2009 (20091210/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Oct 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Aug 2009

Cplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2009.

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<http://www.cas.org/legal/infopolicy.html>

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 13
L4 131193 L3

=> s 14 and py<=2004
25161918 PY<=2004
L5 110765 L4 AND PY<=2004

=> s 15 and partially fluorinated
369980 PARTIALLY
43183 FLUORINATED
1316 PARTIALLY FLUORINATED
(PARTIALLY(W)FLUORINATED)
L6 10 L5 AND PARTIALLY FLUORINATED

=> d 1-10 bib abs

L6 ANSWER 1 OF 10 CPLUS COPYRIGHT 2009 ACS on STN
AN 2002:582016 CPLUS
DN 137:263392
TI Controlling the Energy Levels of Conducting Polymers. Hydrogen versus Fluorine in Poly(dialkylterphenylenevinylene)s
AU Krebs, Frederik C.; Jorgensen, Mikkel
CS Danish Polymer Centre, Riso National Laboratory, Roskilde, DK-4000, Den.
SO Macromolecules (2002), 35(19), 7200-7206
CODEN: MAMOBX; ISSN: 0024-9297
PB American Chemical Society
DT Journal
LA English
AB The control of the position of the energy levels in conducting polymers

through fluorine substitution is demonstrated. The synthesis of four different monomers and polymers of the poly(terphenylenevinylene) type is presented. The synthetic procedure started with 4-bromo-2,5-diocetylphenylboronic acid (1) coupled by the Suzuki method with 4-bromobenzaldehyde to give 4'-bromo-2',5'-diocetyl-4-formylbiphenyl (2) that was again coupled by the Suzuki method with 4-diethylphosphonylmethylphenylboronic acid and 4-cyanomethylphenylboronic acid to give the monomers 4''-diethylphosphonylmethyl-2',5'-diocetyl-4-formylterphenyl (3) and 4''-cyanomethyl-2',5'-diocetyl-4-formylterphenyl (4). The partially fluorinated analogous monomers were prepared similarly employing 2,5-difluoro-3,6-diperfluoroocetyl-1,4-dibromobenzene. This gave 4-bromo-2,5-difluoro-3,6-diperfluoroocetyl-4'-diethylphosphonylmethylbiphenyl (5) and 4-bromo-2,5-difluoro-3,6-diperfluoroocetyl-4''-cyanomethylbiphenyl (6). Compds. 5 and 6 were both subjected to Suzuki couplings with 4-formylphenylboronic acid to give resp. 4-formyl-2',5'-difluoro-3',6'-diperfluoroocetyl-4''-diethylphosphonylmethylterphenyl (7) and 4-formyl-2',5'-difluoro-3',6'-diperfluoroocetyl-4''-cyanomethylterphenyl (8). The monomers 3, 4, 7, and 8 were polymerized to give the polymers poly(2',5'-diocetyl-4,4''-terphenylenevinylene) (9), poly(2',5'-diocetyl-4,4''-terphenylenecyanovinylene) (10), poly(2',5'-difluoro-3',6'-diperfluoroocetyl-4,4''-terphenylenevinylene) (11), and poly(2',5'-difluoro-3',6'-diperfluoroocetyl-4,4''-terphenylenecyanovinylene) (12). Thin films of the polymers on polycryst. gold substrates were subjected to UPS, and the ionization potentials were determined to be 4.85, 4.60, 4.75, and 5.95 eV for 9, 10, 11, and 12 resp. The positions of the highest occupied energy levels were determined to be 1.45, 2.65, 2.25, and 3.05 eV lower than that of gold for 9, 10, 11, and 12, resp. Fluorine and cyano substitution thus allows for an energy level tuning by as much as 1.6 eV.

OSC.G 26 THERE ARE 26 CAPLUS RECORDS THAT CITE THIS RECORD (26 CITINGS)
 RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6	ANSWER 2 OF 10	CAPLUS	COPYRIGHT 2009 ACS on STN
AN	2002:172022	CAPLUS	
DN	136:224305		
TI	Partially fluorinated liquid crystal material		
IN	Wand, Michael; Gough, Neil; Chen, Xin Hua		
PA	Displaytech, Inc., USA		
SO	PCT Int. Appl., 91 PP.		
CODEN	PIXXD2		
DT	Patent		
LA	English		
FAN.CNT	1		
PATENT NO.	KIND	DATE	APPLICATION NO.
-----	-----	-----	-----
PI WO 2002018514	A1	20020307	WO 2001-US27182 20010831 <--
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW			
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG			
US 20030017278	A1	20030123	US 2001-854181 20010511 <--
US 7083832	B2	20060801	
AU 2001085364	A	20020313	AU 2001-85364 20010831 <--
PRAI US 2000-229892P	P	20000901	
US 2001-854181	A	20010511	

WO 2001-US27182 W 20010831

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OS MARPAT 136:224305

AB The invention provides LC compns. that exhibit V-shaped switching when aligned in an analog device configuration and exhibit bistable switching when aligned in a bookshelf-type device configuration. The invention more specifically provides LC compns. of (R = fluorinated alkyl, ether; A, B, C = 5-6 aromatic rings each substituted with 1-4 fluorines and CH can be substituted with N, O, S; d = 0, 1; D = COO, OOC, CH2CH2, double bond, triple bond; Y = Cl-6 alkyl, fluorinated alkyl; R1 = nonchiral tail alkyl with CH2 group replaced by O, S, etc.) which exhibit bistable switching as well as V-shaped switching when aligned in appropriate device configurations. The invention also provides methods of using the compds. of the invention in making LC compns. and electrooptical devices comprising an aligned layer of the compns. of this invention.

OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2009 ACS on STN
AN 2000:811156 CAPLUS

DN 134:72145

TI Stress Optical Behavior of Partially Fluorinated Aliphatic Polyesters

AU Reiss-Nunes, Regina C.; Riande, Evaristo; Guzman, Julio; Chavez, Nelson A.
CS Instituto de Ciencia y Tecnologia de Polimeros, CSIC, Madrid, 28006, Spain
SO Macromolecules (2000), 33(25), 9464-9467
CODEN: MAMOBX; ISSN: 0024-9297

PB American Chemical Society

DT Journal

LA English

AB Thermoelastic networks were prepared by end-linking hydroxyl-terminated poly(neopentyl glycol hexafluoroglutarate) using tris(p-isocyanate phenyl) thiophosphate as crosslinking agent. The plot of birefringence vs. stress exhibits neg. deviations from linearity at elongation ratios larger than 1.9. The value of the optical configuration parameter Δa is 2.98 \AA at 5 $^{\circ}\text{C}$. Theor. calcns. carried out using the rotational isomeric state model give for this parameter the value of 2.24 \AA , in fair agreement with the exptl. results. The cause of the strong discrepancies between the theor. and exptl. results observed for the optical configuration parameter of polyesters containing Ph groups in the acid residue is discussed.

OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2009 ACS on STN
AN 1999:819077 CAPLUS

DN 132:51027

TI Peroxide-curable fluoroelastomers and preparation thereof for seals having improved mechanical properties, compression set and mold-release properties

IN Apostolo, Marco; Albano, Margherita

PA Ausimont S.P.A., Italy

SO Eur. Pat. Appl., 15 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	-----	-----	-----	-----
PI EP 967248	A1	19991229	EP 1999-111563	19990615 <--

EP 967248 B1 20040825
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO
 IT 1301780 B1 20000707 IT 1998-MI1429 19980623 <--
 ES 2226237 T3 20050316 ES 1999-111563 19990615
 KR 2000006329 A 20000125 KR 1999-23371 19990621 <--
 JP 2000034381 A 20000202 JP 1999-174770 19990621 <--
 JP 4219492 B2 20090204
 BR 9907309 A 20001031 BR 1999-7309 19990621 <--
 US 6323283 B1 20011127 US 1999-334562 19990621 <--
 PRAI IT 1998-MI1429 A 19980623

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OS MARPAT 132:51027

AB Curable fluoroelastomers containing diolefin units are formed from (a) 20-70 weight% of a fluoroelastomer having Mooney viscosity, ML(1+10) at 121° (ASTM D 1646) >60 and containing 0.01-3 weight% iodine; (b) 0-70 weight% of a fluoroelastomer [ML(1+10) 20-60] containing 0.2-5 weight% iodine; (c) 5-60 weight% of a fluoroelastomer [ML(1+10) 1-20] containing >0.3 weight% iodine, and R1R2C:CR3CR4:CR5R6, where R1-R6 are independently H or C1-5 alkyl; Z is a linear or branched C1-18 (cyclo)alkylene, optionally containing oxygen atoms, preferably at least partially fluorinated, or (per)fluoropolyoxyalkylene. Thus, vinylidene fluoride (I) 60, perfluoromethyl vinyl ether (II) 34, and tetrafluoroethylene (III) 6 mol% were added to an aqueous perfluoropolyoxyalkylene microemulsion prepared from 32.34 mL CF3O[CF2CF(CF3)]n(CF2O)mCF2COOH (n/m = 10, average mol. weight 600)

and

CF3O[CF2CF(CF3)]n(CF2O)mCF3 (n/m = 20, average mol. weight 450) at 85° to 30 bar pressure, g ammonium persulfate initiator, 56.3 g 1,6-diiodoperfluorohexane chain-transfer agent, and 27.8 g CH2:CH(CF2)6CH:CH2 (IV) were added incrementally with addition of a 75:17:8 M I-II-III mixture to maintain the pressure at 30 bar, giving, after 135 min, a latex of 78.5:17.5:4 M I-II-III copolymer containing IV units and having ML(1+10) 44. Two similar copolymer latexes prepared with different amts. of chain-transfer agent and having ML(1+10) 94 and 7, were cocomplicated (40 and 20 weight%, resp.,) with 40 weight% of the above latex, giving overall ML(1+10) 50. A cured mixture of the cocomplicated latexes 100, Luperco 101XL 2, Drimix TAIC 4.5, ZnO 4, Akrochem blue 602C 0.3, BaSO4 35, and Tremin 283-600EST 35 parts showed modulus at 100% 6.0 MPa, stress at break 12.0 MPa, elongation at break 330%, Shore A hardness 76, and compression set of O-ring (70 h at 200°) 23%, compared with 5.2, 8.0, 249, 72, and 29, resp., using a single I-II-III-IV copolymer latex having ML(1+10) 48.

OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2009 ACS on STN
 AN 1998:640687 CAPLUS

DN 129:309888

OREF 129:63079a,63082a

TI Intercalated compounds of fluorinated graphite with tributyl phosphate
 AU Paasonen, V. M.; Nazarov, A. S.

CS Inst. Neorg. Khim., SO RAN, Novosibirsk, Russia

SO Zhurnal Neorganicheskoi Khimii (1998), 43(8), 1280-1281

CODEN: ZNOKAQ; ISSN: 0044-457X

PB MAIK Nauka

DT Journal

LA Russian

AB The existence of relatively stable (at room temperature) stage 1 intercalation compds. of partially fluorinated graphite with Bu3PO4 was established.

OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L6 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2009 ACS on STN
AN 1994:659462 CAPLUS
DN 121:259462

OREF 121:47287a,47290a

TI Lubricants and magnetic recording media using the lubricants
IN Kondo, Hirofumi; Uchiumi, Toshiharu; Kojika, Yukihiko
PA Sony Corp., Japan
SO Jpn. Kokai Tokkyo Koho, 37 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06145687	A	19940527	JP 1992-321478	19921106 <--
US 5431833	A	19950711	US 1993-147549	19931105 <--

PRAI JP 1992-321478

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OS MARPAT 121:259462

AB Lubricants for coating on magnetic recording media comprise ester compds. of perfluoropolyethers having terminal OH- or COOH groups and long-chain alkyl carboxylic acids or alcs. and 0.01-100 mol (vs. esters) long-chain alkyl amines. Long-chain alkyl groups of the carboxylic acids or alcs. are partially fluorinated, preferably, perfluorinated alkyl groups. The lubricants can further contain ≥1 of additives selected from phosphoric acid esters, phosphorous acid esters and long-chain carboxylic acid esters.

OSC.G 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

L6 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2009 ACS on STN
AN 1990:477669 CAPLUS
DN 113:77669

OREF 113:13135a,13138a

TI Reduction-olefination of esters: a new and efficient synthesis of α-fluoro α,β-unsaturated esters

AU Thenappan, Alagappan; Burton, Donald J.

CS Dep. Chem., Univ. Iowa, Iowa City, IA, 52242, USA

SO Journal of Organic Chemistry (1990), 55(15), 4639-42

CODEN: JOCEAH; ISSN: 0022-3263

DT Journal

LA English

OS CASREACT 113:77669

AB A reduction-olefination sequence was used to convert esters to α-fluoro α,β-unsatd. esters. Esters are reduced with Dibal to aldehydes, which react in situ with [(EtO)₂P(O)CF₃OEt]⁻ Li⁺ to form the title compds. in good yields with high stereoselectivity. The reaction is applicable to aliphatic, aromatic, cyclic, unsatd., perfluorinated, and partially fluorinated esters. The E/Z ratio of unsatd. esters formed in the reaction varies with the cations present in the reaction mixture. Solvents have very little influence on stereochem. The sequential transformation of BzOBu to (E)-PhCO:CF₃OEt and then to (E,E)-PhCH:CFCH:CFCOOEt illustrates the scope of this methodol., which introduces an F atom adjacent to an ester functionality with concomitant elongation of the chain by 2 C atoms.

OSC.G 48 THERE ARE 48 CAPLUS RECORDS THAT CITE THIS RECORD (48 CITINGS)

L6 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2009 ACS on STN
AN 1976:4581 CAPLUS
DN 84:4581

OREF 84:773a,776a

TI Synthesis of partially fluorinated phosphoric diaryl

esters and dialkyl esters and their potential application as additives and/or base oils

AU Lindinger, H.; Fanghaenel, L.

CS Inst. Flugtreib-Schmierst., Dtsch. Forsch.- und Versuchsanst. Luft- und Raumfahrt e.V., Munich, Fed. Rep. Ger.

SO Dtsch. Luft- Raumfahrt, Forschungsber. (1974), DLR-FB 74-69, 35 pp.

DT CODEN: DLRFA8

Report

LA German

AB POCl_3 reacted with ROH , and R_1OH , to give 8 ($\text{RO}(\text{R}_1\text{O})\text{PClO}$ (I; $\text{R} = \text{Ph}$, $\text{R}_1 = 3\text{-MeOC}_6\text{H}_4$; $\text{R} = \text{Ph}$, 2-, 3- or 4-MeOC₆H₄, 2-C₁C₆H₄, 4,2-MeC₁C₆H₃, or 1-naphthyl, $\text{R}_1 = 3\text{-F}_3\text{C}_6\text{H}_4$), or it reacted with 2 moles phenol to give I ($\text{R} = \text{R}_1 = \text{Ph}$, 2-C₁C₆H₄, 2- or 4-MeC₆H₄, or 2,4-MeC₁C₆H₃). I then reacted with R_2OH to give 18 ($\text{RO}(\text{R}_1\text{O})(\text{R}_2\text{O})\text{PO}$ (II; R and R_1 same as in I, $\text{R}_2 = \text{CF}_3\text{CH}_2$, $n\text{-C}_3\text{F}_7\text{CH}_2$, or $\text{H}(\text{CF}_2)_n\text{CH}_2$, where $n = 6, 8$, or 10). II were evaluated as lubricants and as lubricant additives (to BuCH₂CH₂O₂C(CH₂)₈CO₂CH₂CH₂EtBu).

L6 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2009 ACS on STN

AN 1974:449794 CAPLUS

DN 81:49794

OREF 81:7955a,7958a

TI Rotational isomerism in partially fluorinated carbonyl(acetyl)cobalt complexes

AU Lindner, Ekkehard; Zipper, Michael

CS Univ. Tuebingen, Tuebingen, Fed. Rep. Ger.

SO Chemische Berichte (1974), 107(5), 1444-55

CODEN: CHBEAM; ISSN: 0009-2940

DT Journal

LA German

AB (XFCHCO_2)₂₀ ($\text{X} = \text{H}$ and F) reacted with $\text{Na}[\text{Co}(\text{CO})_4]$ or $\text{Na}[\text{Co}(\text{CO})_3\text{P}(\text{OPh})_3]$ to give $\text{XFCHCO}_2\text{Co}(\text{CO})_4$ or $\text{XFCHCO}_2\text{Co}(\text{CO})_3\text{P}(\text{OPh})_3$ (I), resp., which were decarbonylated at -70° to give $\text{XFCHCO}_2\text{Co}(\text{CO})_4$ or $\text{XFCHCO}_2\text{Co}(\text{CO})_3\text{P}(\text{OPh})_3$, resp. I ($\text{X} = \text{H}$) and the known $\text{FCH}_2\text{CO}_2\text{Co}(\text{CO})_3\text{PPh}_3$ were present as rotational isomers at -100 to $+80^\circ$. Theor. considerations showed that a hindered rotation about the C-C bond is preferred to that about the Co-Cacyl bond. On the basis of the ir spectra all the acetyl and methyl complexes possess pseudo-C₃v symmetry. The mass and ¹H-NMR spectra are reported.

OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L6 ANSWER 10 OF 10 CAPLUS COPYRIGHT 2009 ACS on STN

AN 1972:556976 CAPLUS

DN 77:156976

OREF 77:25767a,25770a

TI Synergic solvent extraction of lanthanides with mixtures of aliphatic fluorinated β -diketones and organophosphorus donors

AU Mitchell, James W.; Banks, Charles V.

CS Inst. At. Res., Iowa State Univ., Ames, IA, USA

SO Talanta (1972), 19(10), 1157-69

CODEN: TLNTA2; ISSN: 0039-9140

DT Journal

LA English

AB The extraction of lanthanides from an aqueous acetate-chloride medium into cyclohexane solns. of trifluoroacetyl-acetone, hexafluoroacetylacetone, 6,6,7,7,8,8,8-heptafluoro-2,2-dimethyl-3,5-octanedione and $(\text{BuO})_3\text{PO}$ was studied. The extraction properties of other fluorinated aliphatic β -diketones and fluoro-organophosphates were also investigated. The efficiency of the extraction of the lanthanides, the composition of the complexes transferred to the organic phase and the extraction and stability consts. for the

synergic reactions were determined. Synergic extraction, as a technique for the preparation of lanthanide species, was evaluated for compatibility with subsequent gas chromatog. The lanthanides were rapidly and quant. transferred into organic phases containing mixts. of fluorinated aliphatic β -diketones and (BuO)3PO. The resulting mixed complexes that contained fully fluorinated β -diketones had a distinct stoichiometry and were thermodynamically more stable than similar mixed complexes of partially fluorinated β -diketones. These properties of the synergic systems allow precise control of the formation of anhydrous complexes in the organic phase and are compatible with the use of these systems for gas chromatog.

OSC.G 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

=> s 15 and completely fluorinated
 422987 COMPLETELY
 43183 FLUORINATED
 136 COMPLETELY FLUORINATED
 (COMPLETELY(W)FLUORINATED)
 L7 1 L5 AND COMPLETELY FLUORINATED

=> d bib abs

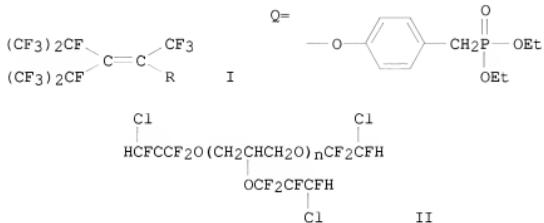
L7 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2009 ACS on STN
 AN 1995:695868 CAPLUS
 DN 123:111550
 OREF 123:19921a,19924a
 TI Fluorinated hydrocarbon compound, process for producing the same, and refrigerator oil and magnetic recording medium lubricant
 IN Ide, Satoshi; Fujiwara, Katsuki; Yamana, Masayuki; Honda, Yoshitaka; Yamamoto, Ikuo; Yamaguchi, Fumihiro; Seki, Eiji; Otsuka, Tatsuya; Ishida, Satoshi
 PA Japan
 SO PCT Int. Appl., 220 pp.
 CODEN: PIXXD2
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9417023	A1	19940804	WO 1994-JP84	19940121 <--
	W: AU, BR, CA, CN, JP, KR, RU, US				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	CA 2154453	A1	19940804	CA 1994-2154453	19940121 <--
	CA 2154453	C	20070619		
	AU 9458658	A	19940815	AU 1994-58658	19940121 <--
	AU 688300	B2	19980312		
	EP 677504	A1	19951018	EP 1994-904753	19940121 <--
	EP 677504	B1	20031001		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	BR 9406760	A	19960305	BR 1994-6760	19940121 <--
	CN 1118156	A	19960306	CN 1994-191263	19940121 <--
	CN 1273430	C	20060906		
	EP 911312	A1	19990428	EP 1998-123495	19940121 <--
	EP 911312	B1	20041027		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE				
	RU 2145592	C1	20000220	RU 1995-117102	19940121 <--
	JP 3324117	B2	20020917	JP 1994-516865	19940121 <--
	AT 251104	T	20031015	AT 1994-904753	19940121 <--
	AT 280749	T	20041115	AT 1998-123495	19940121 <--
	US 6019909	A	20000201	US 1995-492041	19950721 <--
PRAI	JP 1993-9035	U	19930122		

EP 1994-904753
WO 1994-JP84

A3 19940121
W 19940121

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OS CASREACT 123:111550; MARPAT 123:111550
GI



AB A novel fluorinated hydrocarbon compound containing an oxygen or sulfur atom in its mol., e.g., R1R3C:CR2XR4 (R1, R2, R3 = F, partially or completely fluorinated C1-30 linear or branched alkyl or alkenyl optionally substituted by halogens other than F; R4 = C1-30 linear or branched alkyl or alkenyl or poly ether optionally substituted by halogens other than F; X = O, S) is prepared by the nucleophilic reaction of a fluorine compound, e.g., R1R3C:CR2F (R1 - R3 = same as above) with a hydrocarbon compound, e.g., H-XR4 (R4 = same as above). This compound is useful as a lubricant for various applications and particularly excellent as an oil for refrigerators wherein hydrochlorofluorocarbon is used as the refrigerant and as a magnetic recording medium lubricant. Thus, a mixture of perfluoruronenone (I; R = F), phenol, and DMF was treated with Et3N at $\leq 25^\circ$ to give 71% perfluoruronenyl Ph ether I (R = OPh) which was alkylated with chloromethyl Me ether in fuming H2SO4 at 15° to give 71% p-perfluoruronenylbenzyl chloride I (R = p-chloromethylphenoxy). The latter benzyl chloride was condensed with (EtO)3P(O) at 150° to give 84% di-Et p-perfluoruronenylbenzylphosphonate I (R = Q). A magnetic tape prepared by coating a polyethylene phthalate film with a magnetic coating containing title compound (II) as a lubricating oil showed coefficient of friction 0.22

vs. *o*-nitrobenzyl bromide, and the product was isolated as a colorless crystalline compound (II), as a labile lactone, and showed absorption

0.40 for a magnetic tape containing $F(CF_2CF_2CF_2O)_nCF_2CF_3$.

OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CIT)

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS PAPER.

$\lambda = 3.5$ and $\mu = 6.3$ are noted.

and perfluorinated

6862 PERFLUORINATED
50, LF AND DEFLUORINATED

to 2.18 and aluminum

8 and aluminum

1131934 ALUMINUM
18 0 18 AND ALUMINUM

→ 6.18 and aluminum

MILK AND ALUMINUM

18977 ALUMINUM

=> s 18 and boron
 269789 BORON
 L11 0 L8 AND BORON

=> s 18 and gallium
 353739 GALLIUM
 L12 0 L8 AND GALLIUM

=> s 18 and indium
 243564 INDIUM
 L13 0 L8 AND INDIUM

=> s 18 and phosphorus
 365280 PHOSPHORUS
 L14 3 L8 AND PHOSPHORUS

=> d 1-3 bib abs

L14 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2009 ACS on STN
 AN 1997:701402 CAPLUS
 DN 127:307608
 OREF 127:60173a,60176a
 TI Preparation and hemolysis of amphiphilic perfluorinated glycophospholipids and polyethyleneglycols with liposomal compositions as surfactants and emulsifiers
 IN Riess, Jean G.; Greiner, Jacques; Milius, Alain; Vierling, Pierre; Guillod, Frederic; Gaentzler, Sylvie
 PA Alliance Pharmaceutical Corp., USA
 SO U.S., 21 pp., Division of U.S. Ser. No. 893,227.
 CODEN: USXXAM
 DT Patent
 LA English
 FAN.CNT 2

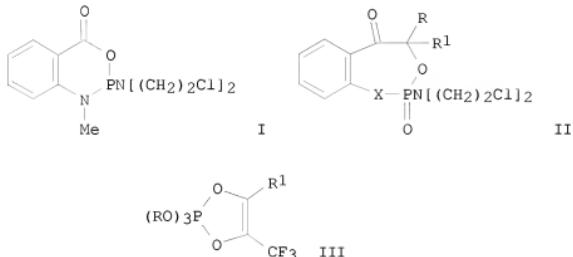
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 5679459	A	19971021	US 1995-467467	19950606 <--
US 5846516	A	19981208	US 1992-893227	19920603 <--
PRAI US 1992-893227	A3	19920603		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
 OS MARPAT 127:307608
 AB Perfluoroalkylated amphiphilic phosphorus compds., R1R2CHXP(V)YZ and R2R3CH(CH₂)_mXP(V)YZ (V = O, S; X = O, S, NH, iminoalkyl; R1, R2, R3 = H or (un)substituted perfluoroalkylated or hydrocarbon radicals; Y, Z = sugar, polyol, hydrophilic polymer such as polyethyleneglycol; m = 1-20) were prepared as surfactants. These compds. can be included in preps., emulsions, dispersions, gels, microemulsions, notably for biomedical uses. Thus, [2-(perfluoroctyl)ethyl]-6-D-glucosyl sodium phosphate (I) was prepared as surfactants and tested for hemolysis (30 g/L) and toxicity in mice (dose = 125, survival 10/10). Formulation of perfluorodecalin and perfluoroctyl bromide with I is reported.

OSC.G 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS RECORD (11 CITINGS)
 RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2009 ACS on STN
 AN 1996:331480 CAPLUS
 DN 125:86736
 OREF 125:16369a,16372a
 TI New phospholene and phosphepine derivatives from λ 3-phosphorus compounds and hexafluoroacetone or perfluorinated α -diketones
 AU Kadyrov, Alexander; Neda, Ion; Kaukorat, Thomas; Sonnenburg, Ralf;

Fischer, Axel; Jones, Peter G.; Schmutzler, Reinhard
CS A. N. Nesmeyanov Institute of Organoelement Compounds, Russian Academy of
Sciences, Moscow, 117813, Russia
SO Chemische Berichte (1996), 129(6), 725-732
CODEN: CHBEAM; ISSN: 0009-2940
PB VCH
DT Journal
LA German
OS CASREACT 125:86736
GT



AB The reaction of the bis(2-chloroethyl)amino-substituted benzoxazaphosphorinone I with (F3C)2CO proceeds with insertion of the carbonyl group of (F3C)2CO into the heterocycle of I to form the oxazaphosphepinedione II (R, R1 = CF3; X = O, NMe). (EtO)3P and (PhO)3P react with F3CCOCOCF (CF3)2 or F3CCOC(CF2)2CF3 with formation of the pentaoxaphosphoranes III [R = Et, Ph; R1 = CF(CF3)2, (CF2)2CF3]. The reaction of the (2-chloroethyl)amino- and bis(2-chloroethyl)amino-substituted 1,3,5,2-triazaphosphorinanediones with F3CCF2COOCF3 furnishes spirophosphorane derivs. with the dioxaphospholene ring system in two cases only. Compound I and 2-[bis(2-chloroethyl)amino]-4H-1,3,2-benzodioxaphosphorin-4-one react with the perfluorinated α -diketones F3C(CO)2CF(CF3)2 or F3C(CO)2(CF2)2CF3 with insertion of the diketones into the heterocycle with formation of compds. containing dioxo- and oxazaphosphepinone ring systems. The expected oxidative addition of the diketones to 3 λ P with formation of spirophosphoranes was not observed. Compds. II [X = O, NMe; R = CF3; R1 = COOC(CF3)2, CO(CF2)2CF3 or R = CF(CF3)2, (CF2)2CF3; R1 = COOCF3] were obtained as mixts. of isomers. Single crystal x-ray structure analyses were conducted on II (R = R1 = CF3; X = NMe) (IV) and III [R = Ph, R1 = CF(CF3)2] (V). The 7-membered ring of IV is in a boat conformation, with the O and benzo C atoms lying out of the plane of the other 4 atoms. The 2 independent mol. s. of V are similar, but differ in the degree of distortion from trigonal-bipyramidal geometry of P.

L14 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2009 ACS on STN
AN 1994-332254 CAPLUS

AN 1994.552554 CAFLOS
BN 130.3333E4

DN 120:332334
ORFF 120:58283-

REF 120:58297a, 58300a
T1 The Empirical Test

The Empirical Treatment

AU Laurence, Christian; Nicolet, Pierre; Dalati, M. Tawfik; Abboud, Jose-Luis M.; Notario, Rafael

CS Laboratoire de Spectrochimie Moleculaire, Universite de Nantes, Nantes,
F-44072, Fr.
SO Journal of Physical Chemistry (1994), 98(23), 5807-16
CODEN: JPCHAX; ISSN: 0022-3654
DT Journal
LA English
AB The near-UV-visible spectra of 4-nitroanisole (OMe) and
N,N-dimethyl-4-nitroaniline (NMe2) were obtained at 25.0 ± 0.1°
in the gas phase and in a set of 229 solvents that includes
non-hydrogen-bond donors such as hydrocarbons (aliphatic, alicyclic,
ethylenic, and aromatic), perfluorinated and other halogenated
hydrocarbons (aromatic and nonarom.), nitriles, ketones, esters, lactones,
anhydrides, amides, ureas, phosphates, HMPA, sulfates, sulfites,
sulfoxides, sulfones, pyridines, and tertiary amines as well as weak
hydrogen-bond donors such as nitrocompounds and primary and secondary
amines. The frequencies of the absorption maximum of these spectra were used
to refine and critically examine the π^* scale of solvent effects. The
dielec. consts. and refractive indexes of the solvents (mostly from this
work) were used in an Oshika-Bayliss-McRae (OBM) treatment of these
frequencies that led to the following results: (i) The partitioning of
dipolarity and polarizability contributions to π^* ; (ii) the quant.
assessment of more specific contributions to π^* due to aromatic solvents.
This study also showed the limitations of the OBM treatment and the
advantages of the empirical approach. General conclusions regarding the
phys. meaning and the use of scales of solvent effects (excluding hydrogen
bonding) were drawn.
OSC.G 197 THERE ARE 197 CAPLUS RECORDS THAT CITE THIS RECORD (197 CITINGS)

=> s 18 not 114
L15 47 L8 NOT L14

=> d his

(FILE 'HOME' ENTERED AT 12:33:15 ON 11 DEC 2009)

FILE 'REGISTRY' ENTERED AT 12:33:48 ON 11 DEC 2009

L1 STRUCTURE uploaded
L2 50 S L1
L3 97771 S L1 FULL

FILE 'CAPLUS' ENTERED AT 12:36:04 ON 11 DEC 2009

L4 131193 S L3
L5 110765 S L4 AND PY<=2004
L6 10 S L5 AND PARTIALLY FLUORINATED
L7 1 S L5 AND COMPLETELY FLUORINATED
L8 50 S L5 AND PERFLUORINATED
L9 0 S L8 AND ALUMINUM
L10 0 S L8 AND ALUMINUM
L11 0 S L8 AND BORON
L12 0 S L8 AND GALLIUM
L13 0 S L8 AND INDIUM
L14 3 S L8 AND PHOSPHORUS
L15 47 S L8 NOT L14

=> s 18 and arsenic
131817 ARSENIC
L16 0 L8 AND ARSENIC

=> s 18 and antimony
131368 ANTIMONY
L17 0 L8 AND ANTIMONY

=> s 18 and fluorinated alkoxy
 43183 FLUORINATED
 129832 ALKOXY
 79 FLUORINATED ALKOXY
 (FLUORINATED(W)ALKOXY)
L18 0 L8 AND FLUORINATED ALKOXY

=> s 18 and partially fluorinated alkoxy
 369980 PARTIALLY
 43183 FLUORINATED
 129832 ALKOXY
 3 PARTIALLY FLUORINATED ALKOXY
 (PARTIALLY(W)FLUORINATED(W)ALKOXY)
L19 0 L8 AND PARTIALLY FLUORINATED ALKOXY

=> s 18 and perfluorinated alkoxy
 6962 PERFLUORINATED
 129832 ALKOXY
 7 PERFLUORINATED ALKOXY
 (PERFLUORINATED(W)ALKOXY)
L20 0 L8 AND PERFLUORINATED ALKOXY

=> s 18 and completely fluorinated alkoxy
 422987 COMPLETELY
 43183 FLUORINATED
 129832 ALKOXY
 0 COMPLETELY FLUORINATED ALKOXY
 (COMPLETELY(W)FLUORINATED(W)ALKOXY)
L21 0 L8 AND COMPLETELY FLUORINATED ALKOXY

=> s 18 and trialkoxy
 803 TRIALKOXY
L22 0 L8 AND TRIALKOXY

=> s 18 and tert-butyalkoxy
 300058 TERT
 1 BUTYLALKOXY
 0 TERT-BUTYLALKOXY
 (TERT(W)BUTYLALKOXY)
L23 0 L8 AND TERT-BUTYLALKOXY

=> s 18 and tert-butyl alkoxy
 300058 TERT
 316785 BUTYL
 129832 ALKOXY
 3 TERT-BUTYL ALKOXY
 (TERT(W)BUTYL(W)ALKOXY)
L24 0 L8 AND TERT-BUTYL ALKOXY

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DICTIONARY FILE UPDATES: 10 DEC 2009 HIGHEST RN 1196958-61-8

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chain nodes :
2 3 5 6 7 9 10 11 12 13 14 15 16 17 18 19 20 21 23 24 25
chain bonds :
2-3 2-6 2-9 2-10 3-5 6-7 9-11 10-12 11-13 11-14 11-15 12-16 12-17
12-18 13-20 14-19 15-21 16-25 17-23 18-24
exact/norm bonds :
2-3 2-6 2-9 2-10 3-5 6-7 9-11 10-12 11-13 11-14 11-15 12-16 12-17
12-18 13-20 14-19 15-21 16-25 17-23 18-24

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G1:B,Al,Ga,In,P,As,Sb

G2:Cb,Cy,Hy,Ak

```

Match level :
2:CLASS 3:CLASS 5:CLASS 6:CLASS 7:CLASS 9:CLASS 10:CLASS 11:CLASS 12:CLASS
13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS 19:CLASS 20:CLASS
21:CLASS 23:CLASS 24:CLASS 25:CLASS

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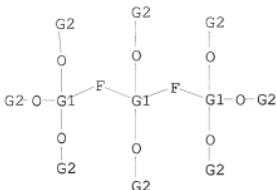
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FILE 'REGISTRY' ENTERED AT 21:33:00 ON 11 DEC 2009
L1 STRUCTURE UPLOADED

=> d 11

L1 HAS NO ANSWERS
L1 STR



G1 B, Al, Ga, In, P, As, Sb

G2 Cb, Cy, Hy, Ak

Structure attributes must be viewed using STN Express query preparation.

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SAMPLE SCREEN SEARCH COMPLETED - 111 TO ITERATE

100.0% PROCESSED 111 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 1588 TO 2852
PROJECTED ANSWERS: 0 TO 0
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L2 0 SEA SSS SAM L1

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FULL SEARCH INITIATED 21:33:33 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 2032 TO ITERATE
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100.0% PROCESSED 2032 ITERATIONS 2 ANSWERS
SEARCH TIME: 00.00.01
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L3 2 SEA SSS FUL L1

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=> fil caplus
COST IN U.S. DOLLARS SINCE FILE TOTAL
                           ENTRY SESSION
FULL ESTIMATED COST 185.88 186.10
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FILE LAST UPDATED: 10 Dec 2009 (20091210/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Oct 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Aug 2009

CAPLUS now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2009.

CAS Information Use Policies apply and are available at:

<http://www.cas.org/legal/infopolicy.html>

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 13
L4 1 L3

=> d bib abs

L4	ANSWER 1 OF 1	CAPLUS	COPYRIGHT 2009 ACS on STN
AN	2005:523465	CAPLUS	
DN	143:37559		
TI	Method for the production of salts of weakly fluorinated alcoholato complex anions of main group elements		
IN	Krossing, Ingo; Gonsior, Marcin; Mueller, Lutz		
PA	Universitaet Karlsruhe TH, Germany		
SO	PCT Int. Appl., 27 pp.		
	CODEN: PIXXD2		
DT	Patent		
LA	German		
FAN.CNT	1		
PATENT NO.	KIND	DATE	APPLICATION NO.
-----	-----	-----	-----
PI	WO 2005054254	A1	20050616 WO 2004-EP12220 20041028
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, US, UZ, VC, VN, YU, ZA, ZM, ZW		
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG		
	DE 10356768	A1	20050707 DE 2003-10356768 20031204
	EP 1689756	A1	20060816 EP 2004-790989 20041028
	EP 1689756	B1	20070815
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK		
	AT 370150	T	20070915 AT 2004-790989 20041028
	US 20080033195	A1	20080207 US 2007-580974 20070612
PRAI	DE 2003-10356768	A	20031204
	WO 2004-EP12220	W	20041028
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT			
OS	MARPAT 143:37559		
AB	The invention relates to a method for the production of salts of weakly fluorinated alcoholato complex anions according to the following formulas, $M[FX(ORF)m]z$ (1) $M[(FRO)mXF(ORF)m]z$ (2) and $M[(FRO)mXF(ORF)nFX(ORF)m]z$		

(3) (X = B, Al, Ga, In, P, As, Sb; M = monovalent or divalent cation; n = 2 for m = 3 or n = 4 for m = 5; y = 1-2). For example, Ag[FA1(OC(CF3)3)3] in 98 % yield was prepared by the reaction of AlMe3 with HOC(CF3)3 in presence of AgBF4 in pentane.

OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

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